# Wisconsin Projections 2004-2014 In Brief

#### Introduction

Wisconsin is expected to create 348,000 jobs between 2004 and 2014. With growth of 12%, employment is projected to increase from 3.03 to 3.38 million jobs. In addition to newly created jobs, another 719,000 positions will be open due to replacement needs. These nearly 1.07 million total job openings will be found among 800 occupations and will need people with a variety of skills, interests, and educational backgrounds.

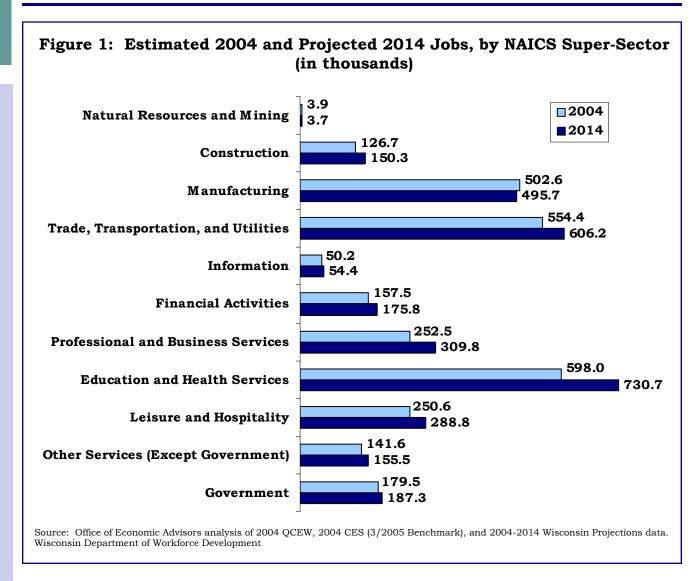
Data outlining the 2004-2014 employment outlook for 90 industries and 800 occupations is now available on the Office of Economic Advisors website at http://dwd.wisconsin.gov/oea/employment\_projections.htm. Wage information and typical education and training paths are also included for each occupation. This paper highlights some of the findings.

## **Industry Employment**

Among the industry super-sectors, education and health services will lead the way with an anticipated 133,000 new jobs (see figure 1). Professional and business services is second with 57,000 additional jobs. Manufacturing, and natural resources and mining, are the two sectors projected to lose jobs. Manufacturing employment is expected to decrease by nearly 7,000 jobs. Natural resources and mining is expected to lose about 200 positions.

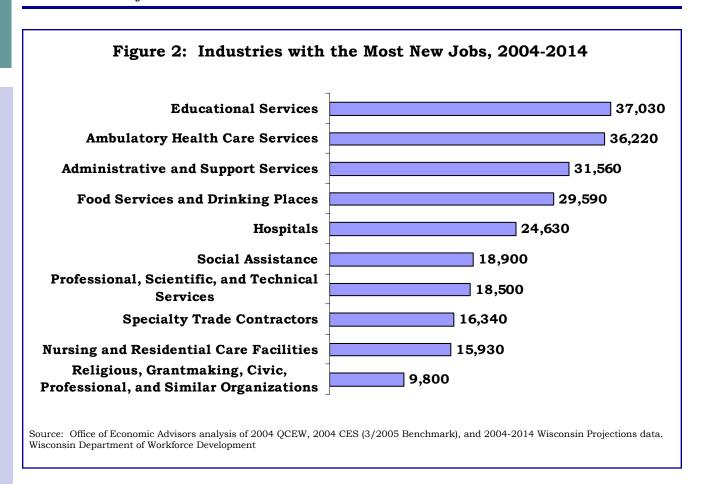
While the official employment count in manufacturing is projected to decline, this does not mean there will be less of a need for workers to perform these jobs. Increasingly manufacturing firms are relying on temporary workers to perform many jobs instead of hiring these workers directly. In the employment data, these temporary workers are included under professional and business services instead of manufacturing.

For example, one group of workers traditionally concentrated in manufacturing is production workers. Between 2004 and 2014 the percentage of all production workers in manufacturing is expected to decline from 78 to 75%. The proportion of production workers in professional and business services is projected to increase from seven to nine percent. At the same time, over 7,000 new jobs for production workers are expected to be created in the economy overall.



At a more detailed level, the ten industries expected to add the most new jobs are illustrated in figure 2. These industries are anticipated to contribute nearly seven out of every ten newly created jobs. The top three industries — educational services, ambulatory health care services, and administrative and support services — are expected to account for 30% of job creation.

Educational services tops the list with 37,000 new jobs. Educational services includes all public and elementary, secondary, and post-secondary schools. Educational support services such as testing, guidance counseling, and student exchange programs are also included. Within this industry, the occupations growing the most will be elementary teachers (except special education), teacher assistants, and secondary teachers (except special education).



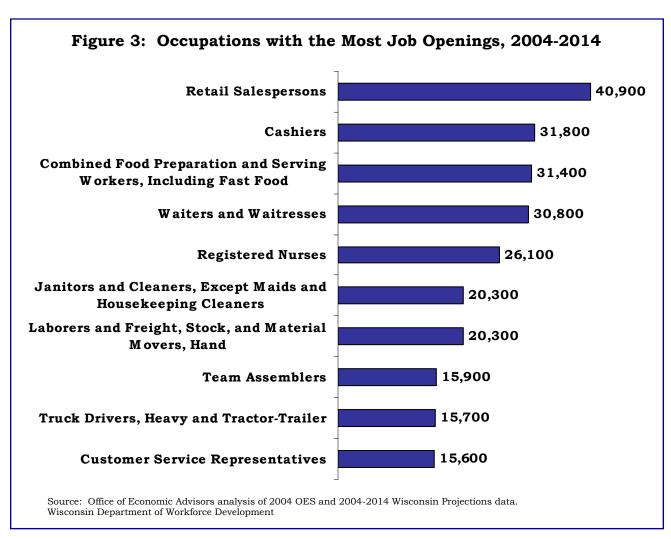
Ambulatory health care services is projected to add 36,000 jobs. This industry is made up of offices of doctors, dentists, and other health practitioners. The industry also includes home health care services. Registered nurses, medical assistants, and dental assistants will be the occupations with the most new jobs.

Administrative and support services is expected to add the third largest number of new jobs with almost 32,000. This group of businesses performs functions that support the day-to-day operations of other organizations. Some examples of the services offered are travel arrangements, temporary employment, security, and cleaning. The occupations anticipated to have the most growth are janitors and cleaners (except maids and housekeeping cleaners); inspectors, testers, sorters, samplers, and weighers; and landscaping and groundskeeping workers.

## **Occupational Employment**

Over the 2004-2014 period, Wisconsin is expected to have 1.07 million job openings. About 348,000 of these openings will be newly created jobs. The remaining 719,000 openings will occur due to deaths, retirements, or other permanent exits from occupations. Openings resulting from people changing employers, but staying in the same occupation are not included in the projections.

Overall 455 out of Wisconsin's 793 occupations will each have at least 300 job openings during the decade. The ten occupations expected to have the most openings are outlined in figure 3. These ten occupations will account for 23% of the state's openings.



The top four occupations — retail salespersons, cashiers, combined food preparation and serving workers, and waiters and waitresses — are connected to growth in the retail trade and leisure/hospitality industries. In addition, most people tend to hold these jobs for relatively short periods of time before moving on to other occupations.

The fifth ranked occupation is registered nurses. Job openings in this occupation are linked to the growth in Wisconsin's population over age 45 and that group's increasing demand for health services. Also, a large number of people are expected to leave the occupation due to retirement or career changes.

### **Education and Training**

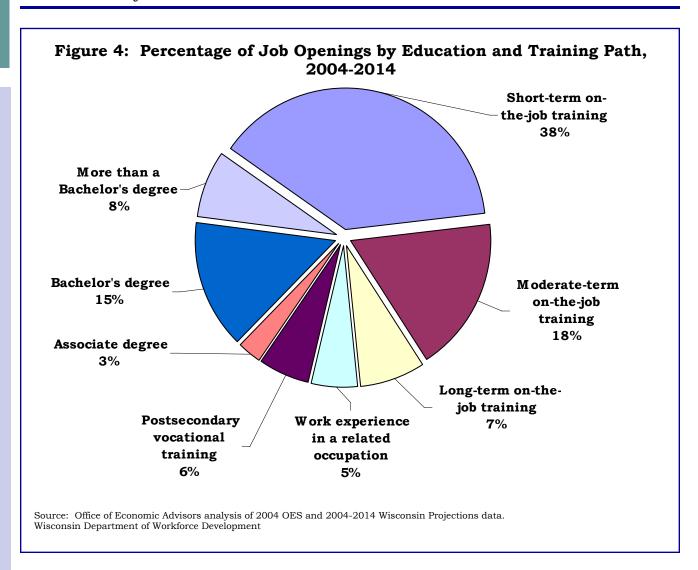
Each occupation is assigned to one of eleven education and training paths. The assignment only gives a general indication of the education or training typically needed in the occupation. There may be other pathways into the occupation, as well as additional educational, training, or licensing requirements. Figure 4 illustrates the percentage of job openings anticipated in each education and training group.

Among the job openings expected between 2004 and 2014, 56% fall into either short—or moderate-term on-the-job training categories. Short-term on-the-job training means the duties of the position can be learned at the workplace in one month or less. Moderate-term on-the-job training lasts one to twelve months and may involve a combination of on-the-job experience and informal training. Some examples of occupations in these training categories are medical assistants, general office clerks, and cashiers.

About 7% of openings will generally require long-term on-the-job training. This training takes more than a year and usually involves a combination of learning at the job site and formal classroom instruction. The training is often an adult apprenticeship. Occupations in this group include plumbers, machinists, and police patrol officers.

Another 6% of openings typically require postsecondary vocational training. These are formal training programs that last from a few weeks to more than a year. Included in this category are automotive service technicians, cosmetologists, and welders.

Work experience in a related occupation will be the typical pathway in 5% of the job openings. These jobs require skills and experience gained in related positions. Many of these jobs are first-line supervisory positions.



An associate degree will be the requirement in 3% of the openings. This degree involves two years of full-time academic work beyond high school. Examples of occupations in this category are dental hygienists, industrial engineering technicians, and paralegals.

The remaining 23% of openings will generally require a bachelor's or higher degree (such as a master's or doctorate degree). Several of these positions will also require work experience in addition to the degree. Physicians, lawyers, computer software engineers, and financial managers are examples of occupations that usually require at least a bachelor's degree.

## **Additional Projections Information**

The complete set of 2004-2014 industry and occupational employment projections data is available on the Office of Economic Advisors website, http://dwd.wisconsin.gov/oea/employment\_projections.htm.

Short-term projections for 2005-2007 are also available on the website listed above.

#### **Notes**

The projections are for one point in time, in this case 2014. In order to gauge which industries and occupations are expected to have net increases and decreases in jobs over time, the employment level anticipated in 2014 is compared to that in 2004. The projections do not provide information about the dynamics of employment in the intervening years between 2004 and 2014. Jobs overall, and jobs in any particular industry or occupation, may have many ups and downs during the ten year period. The projections only indicate where employment is expected to be in 2014 relative to 2004.

The projections were developed using the 2004 OES Survey, 2004 QCEW, and 2004 CES (3/2005 Benchmark) data produced by the Bureau of Workforce Information in Wisconsin's Department of Workforce Development. Unpublished data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau was also used.

To the extent possible the projections take into account anticipated changes in Wisconsin's economy between 2004 and 2014. It is important to note unanticipated events may affect the accuracy of the projections.

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